

In the Claims:

Please cancel claims 1-13 in their entirety without prejudice or disclaimer to subject matter therein.

Please add new claims 14-26 as follows:

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14. (New) A method for producing a formed member made of a steel sheet comprising the steps of:

1+4
preparing a steel sheet material having tensile strength of 500 MPa or less and containing a nitriding element;

forming a formed member having a predetermined shape by performing a plastic forming on the steel sheet material;

performing a nitriding treatment on the formed member so that an average hardness in the sheet thickness direction of the resultant steel sheet member is Hv 300 or more by Vickers hardness; and

wherein only a specific region of the formed member is strengthened by the nitriding treatment, and when the formed member deforms by bending, the formed member deforms at a boundary between the specific region and an unspecific region as an origin.

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15. (New) The method for producing a formed member made of a steel sheet according to claim 14, wherein the steel sheet material contains as the nitriding element, a predetermined amount of at least one element of titanium (Ti), niobium (Nb), boron (B), vanadium (V) and aluminum (Al).

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16. (New) The method for producing a formed member made of a steel sheet according to claim 14, wherein the difference in hardness between a surface part and an inside center part in the thickness direction of the steel sheet member of the formed member is Hv 200 or less by Vickers hardness.

5 17. (New) The method for producing a formed member made of a steel sheet according to claim 14, wherein before the nitriding treatment, a masking treatment is performed on a part other than the specific region of the formed member.

6 18. (New) The method for producing a formed member made of a steel sheet according to claim 14, wherein the nitriding treatment is performed while only the specific region of the formed member is immersed in a salt bath.

19. (New) A method for producing a formed member made of a steel sheet for a vehicle body comprising the steps of:

preparing a steel sheet material having tensile strength of 500 MPa or less and containing a nitriding element;

1, 2 + 3 wherein the steel sheet material contains as the nitriding element, a predetermined amount of at least one element of titanium (Ti), niobium (Nb), boron (B), vanadium (V) and aluminum (Al);

forming a formed member having a predetermined shape by performing a plastic forming on the steel sheet material; and

performing a nitriding treatment on the formed member so that an average hardness in the sheet thickness direction of the resultant steel sheet member is Hv 300 or more by Vickers hardness;

wherein the difference in hardness between a surface part and an inside center part in the thickness direction of the steel sheet member of the formed member is Hv 200 or less by Vickers hardness.

7 20. (New) The method for producing a formed member made of a steel sheet for a vehicle body according to claim 19, wherein forming the formed member having a predetermined shape is performed by a method comprising the steps of:

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preparing a first blank material and a second blank material having different elongation properties, wherein the difference in elongation property between them is set within a predetermined range;

forming a preform by joining those blank materials; and

performing a plastic forming on the preform to obtain a formed member of a predetermined shape.

8 21. (New) The method for producing a formed member made of a steel sheet for a vehicle body according to claim 19, wherein the formed member has a closed section shape and is reinforced by a method comprising the steps of:

setting a foam material by adhesion to at least a region subjected to the nitriding treatment; and

causing the foam material to expand by heating the formed member.

9 22. (New) The method for producing a formed member made of a steel sheet for a vehicle body according to claim 19, wherein forming the formed member having a predetermined shape is performed by a method comprising the steps of:

forming a preform having a pipe-like shape which is relatively approximate to a final shape of the formed member;

setting the preform in a predetermined mold; and

forming the preform by supplying the closed section space thereof with a pressurized fluid to perform a plastic forming on the preform, thereby obtaining the formed member corresponding to a shape of the mold.

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+ 2+3
23. (New) A formed member made of a steel sheet for a vehicle body having an average hardness in the sheet thickness direction of Hv 300 or more by Vickers hardness by plastically forming a steel sheet into a predetermined shape and performing a nitriding treatment after the plastic forming;

wherein the steel sheet material has a tensile strength of 500 MPa or less and contains as a nitriding element, a predetermined amount of at least one element of titanium (Ti), niobium (Nb), boron (B), vanadium (V) and aluminum (Al); and

wherein a difference in hardness between a surface part and an inside center part in the thickness direction of the steel sheet member of the formed member is Hv 200 or less by Vickers hardness.

11 24. (New) The formed member made of a steel sheet for a vehicle body according to claim 23, wherein the formed member is formed to a predetermined shape through a plastic forming on a preform obtained by joining a first blank material and a second blank material of which the difference in elongation property between the first blank material and the second blank material is set within a predetermined range.

12 25. (New) The formed member made of a steel sheet for a vehicle body according to claim 23, wherein the formed member has a closed section shape and at least a part of an internal space of the formed member is filled with foamed material by setting a foam material by adhesion to at least a region subjected to the nitriding treatment and causing the foam material to expand by heating the formed member.

13 26. (New) The formed member made of a steel sheet for a vehicle body according to claim 23, wherein the formed member is formed to a predetermined shape by forming a preform having a pipe-like shape which is relatively approximate to a final shape of the formed member, setting the preform in a predetermined mold, and forming the preform by supplying the closed section space thereof with a pressurized fluid to perform a plastic forming on the preform, thereby obtaining the formed member corresponding to a shape of the mold.

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